



Developments Special Report

Head Start: How It Affects the School Readiness Of Children in Urban Neighborhoods

Head Start has stood as the largest and longest-running early childhood care and education government program in the United States for nearly four decades—and one of the most heavily researched. Yet, despite evidence of both short- and long-term benefits, debate lingers over how effective it is at achieving its primary goal of improving the school readiness of low-income children.

Fueling debate has been the fact that, over the years, the findings of studies that examined the effectiveness of Head Start have varied, ranging from those that suggest the program does little or nothing to improve school readiness to those that suggest it offers young, low-income children significant benefits.

Rigorous Head Start studies in the past decade, however, have found the program to have a positive influence on children's school preparation. The only randomized experiment to date—the 2005 U.S. Department of Human Services Head Start Impact Study—reported short-term benefits, although the gains tended to fade in the longer term.

More recently, a large, longitudinal study of Head Start in 18 U.S. cities found the program to be associated with improvements in the cognitive ability and social competence of enrolled children, who also showed reduced attention problems. The study also reported that the effects varied depending on the type of care or early education services received by comparison groups of children.

This special report is a summary of that 2011 study, which was published in the American Psychological Association journal, *Developmental Psychology*, by Jeanne Brooks-Gunn and Jane Waldfogel of Columbia University and Fuhua Zhai of Stony Brook University.

Head Start

Head Start was begun in 1965 as a comprehensive child development program to promote school readiness by providing high-quality early education services and nutritional, social and other support to young, low-income children and their families. Since then it has served an estimated 30 million low-income U.S. children.

Several characteristics of Head Start teachers and parents have been identified in the 2005 Head Start Impact Study data. For example, compared with teachers in other center-based classrooms of low-income children, Head Start teachers tend to be less harsh, less detached, less permissive, more sensitive, and more likely to encourage children to be independent, more involved in learning and more cooperative with their teachers and classmates.

Compared with parents whose children weren't in the program, Head Start parents were found to be more emotionally supportive, more likely to read to their children and less detached. The data also suggest they are less likely to use physical discipline and provide a better-quality home environment.

Such teacher and parent characteristics and learning and home environments are well suited to promoting school readiness. A large body of evidence gathered over the years has consistently linked high-quality care to children's cognitive development, social competence and attention, especially when measured by indicators such as caregiver warmth, sensitivity, responsiveness, consistency and stimulation of interactions. Studies also suggest such care is particularly beneficial to children with disadvantaged backgrounds.

Previous Research

Despite the potential of such attributes, the outcomes of children reported in previous studies of Head Start effectiveness vary considerably, ranging from producing negative or no effects to promoting substantially positive long-term gains.

Selection bias in previous studies is considered one of the main reasons for such divergent findings. Head ▶

Start serves disadvantaged children. Overall, these children tend to have poorer developmental status than more advantaged children before entering the program. Most Head Start children also have lower math skills and literacy scores when they enter.

Those and other factors, such as parental stress and low parental education, can affect the outcomes of Head Start children. As a result, simply comparing their outcomes to those of nonparticipants could bias the estimated effects of Head Start in observational studies, which account for the vast majority of studies done on the program.

Another challenge in previous studies is the composition of the reference group of children with which Head Start children were compared. These groups varied considerably across studies and time. Studies from the 1960s and 1970s, for example, were conducted during a time when few young children attended preschool. Today, many children not in Head Start get some type of childcare, and programs and policies vary across states and localities with differences seen in such key issues as access, funding levels, program standards and teacher quality.

As a result, the care children in non-Head Start control groups had access to and received might vary substantially across studies. Research has shown the type and quality of care are closely related to developmental outcomes. That suggests unless the reference group is clearly defined, the estimated effects of Head Start can vary significantly across studies depending on the experiences of children who had other care arrangements.

Yet, with few exceptions, that was not previously done. In many past studies, estimates of Head Start effects were drawn from simply comparing Head Start children to all other children who experienced a variety of alternative care settings ranging from exclusively parental care to other center-based care.

The most recent major Head Start study took steps to address those shortcomings in order to provide a more accurate reading of how well the federal program prepares disadvantaged young children for school.

Recent Findings

In their 2011 study, Jeanne Brooks-Gunn and colleagues investigated the effects of Head Start on school readiness using data from the Fragile Families and Child Well-Being Study, a large, longitudinal birth

cohort study of mostly low-income children born in hospitals serving disadvantaged communities in large U.S. cities. The sample of mostly disadvantaged children helped to address issues related to selection bias. They took other steps as well. For example, they controlled for children's initial developmental status.

The researchers first compared Head Start children with all nonparticipants, regardless of their childcare arrangements. To address the previous problem of using poorly defined reference groups, they also separately compared Head Start children with children who had other kinds of care arrangements, such as prekindergarten and parental care. They also looked at whether the effects of Head Start were influenced by children's gender, race and ethnicity.

Overall, researchers found Head Start offered significant benefits to low-income children's preparation for school, including improvements in cognitive de-

Research offers evidence that poor social-emotional interactions play a role in a number of troubling developmental outcomes ranging from poor physical growth to attachment problems and general behavioral and mental deficits.

velopment and social competence, as well as fewer attention problems at age 5. Head Start, however, had no statistically significant effects on children's internalizing and externalizing behavior problems.

The findings they reported were roughly comparable to the findings reported in the Head Start Impact Study, with one important exception. Jeanne Brooks-Gunn and colleagues provide insight into the disparities reported in previous studies. They found that the reported effects of Head Start often depend on the type of childcare received by control group children with whom Head Start students are compared.

Child Care Arrangements

The proportion of children in various types of childcare other than Head Start tended to vary from study to study. In the Head Start Impact Study, for example, 48 percent of the children who were compared with Head Start children received parental care, 35 percent attended other childcare centers and 18 percent had other non-parental care. ►

Among the disadvantaged children Brooks-Gunn and colleagues studied, 19 percent of those not in Head Start received parental care, 29 percent attended prekindergarten, 43 percent attended other center-based care and 9 percent had other non-parental care.

When compared with children who had parental care right before entering kindergarten, Head Start participants scored considerably better on measures of cognitive development, such as the Peabody Picture Vocabulary Test and WJ-R Letter-Word Identification test. They were also found to be more socially competent, as measured by the Adaptive Social Behavior Inventory.

In contrast, Head Start children scored higher only on measures of social competence when compared with non-participating children who attended pre-kindergarten programs that tended to be associated with cognitive gains.

Head Start children did better on social and behavioral measures compared to children who attended other center-based programs, which have been found to be associated with more behavior problems for some children. The study found that Head Start participants were more socially competent, and had fewer attention and externalizing behavior problems.

Children who participated in Head Start also had higher cognitive scores on the Peabody Picture Vocabulary Test and WJ-R Letter-Word Identification test and had fewer attention problems when compared with children who had other non-parental care, a mixed category of care that generally has not been reported to promote improvements in learning and behavior. In the study, non-parental care included care provided by grandparents, other relatives and by people not related to the child.

The researchers also looked at the role of children's gender, race and ethnicity in regard to Head Start effects. Their examination did not provide evidence that the effects of Head Start on school readiness were moderated by those factors, although they noted that the small sample size might have limited their ability to detect significant interactions.

Policy Implications

Despite decades of study, the debate over the effectiveness of Head Start has been clouded by wide-ranging disparities in the findings of some of those studies. The recent 2011 study by Brooks-Gunn and colleagues using a sample of mostly disadvantaged children in major U.S. cities sheds important light on the effective-

ness of Head Start in preparing young children for school, as well as on why previous research offers mixed conclusions.

The study reports that, overall, Head Start is associated with improved cognitive ability and social competence and fewer attention problems among young children who participate in the program. Perhaps just as important, the study shows that the benefits of Head Start are somewhat different depending on the childcare arrangements experienced by children with whom Head Start participants are compared.

Another policy implication is that if improving cognitive development is a goal, it would be important to target Head Start funds to children who otherwise would receive only parental or non-parental care, since the cognitive benefits of participating in Head Start were the largest when compared to such children. Given the low average skills of children entering Head Start, another policy consideration might be to increase the capacity of programs to improve children's cognitive skills.

A clear, more accurate picture of the effectiveness of Head Start is of growing importance as federal and state governments look to cut public expenditures, sometimes drastically. The \$7.5 billion Head Start budget in fiscal 2013, for example, reflects a greater than 5 percent funding cut over the previous year.

References

Brooks-Gunn, J., Waldfogel, J., & Zhai, F. (2011). Head Start and urban children's school readiness: A birth cohort study in 18 cities. *Developmental Psychology*, 47 (1), 134-152.

This Special Report is based on the above-referenced paper. It is not intended to be an original work but a summary for the convenience of our readers. References noted in the text follow:

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